(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International publication date 29 July 2004 (29.07.2004)

PCT

(10) International publication number

WO 2004/062915 A1

(51) International patent classification⁷:

B41F 5/24, 13/02

(21) International application number:

PCT/DE2003/004258

(22) International filing date:

30 December 2003 (30.12.2003)

(25) Language of filing:

German

(26) Language of publication:

German

(30) Data relating to the priority:

103 00 502.1 8 January 2003 (08.01.2003)

DE

- (71) Applicant (for all designated States except US): ROSENBERG GMBH + CO. [DE/DE]; Breslauer Strasse 21, 37154 Northeim (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (US only): THIMM, Klaus [DE/DE]; Wieterallee 20, 37154 Northeim (DE). BECKER, Wolfgang [DE/DE]; Freiherr-vom-Stein-Strasse 39, 37154 Northeim (DE).

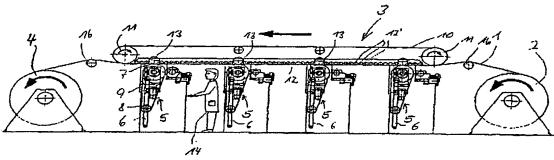
- (74) Attorney: REHMANN, Thorsten; Gramm, Lins & Partner GbR, Theodor-Heuss-Strasse 1, 38122 Brunswick (DE)
- (81) Designated states (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE (utility model), DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated states (regional): ARIPO Patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian Patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European Patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI Patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[continued on next page] .

As printed

(54) Title: PRINTING MACHINE AND METHOD FOR PRINTING A PRINT WEB

(54) Bezeichnung: DRUCKMASCHINE UND VERFAHREN ZUM BEDRUCKEN EINER DRUCKBAHN



(57) Abstract: In order to print a print web (1) by means of a plurality of printing groups (5), the print web (1) is guided in the region of the printing groups (5) on a support band (10) which is transported at the same speed and multiple printing is carried out by printing groups (5) arranged next to each other in the direction of transport of the support band (10). Preferably, the printing groups (5) are arranged on vertical machine stands (6), which are disposed near to each other and parallel to each other, and terminate with plate cylinders (7) at the same level, thereby enabling the print web (1) to run through a print zone (3) in a substantially horizontal manner.

(57) Zusammenfassung: Zum Beilricken einer Druckbahn (1) mittels einer Mehrzahl von Druckwerken (5), wird die Druckbahn (1) im Bereich der Druckwerke (5) auf einem mit gleicher Geschwindigkeit transportierten Stützband (10) geführt und die mehrfache Bedruckung durch die in Transportiehtung des Stützbandes (10) nebeneinander angeordneten Druckwerke (5) vorgenommen. Vorzugsweise sind die Druckwerke (5) an nebeneinander und parallel zueinander siehenden vertikalen Maschinenständem (6) angeordnet und enden mit Plattenzylindern (7) auf gleicher Höhe, sodass die Druckbahn (1) im Wesenlichen horizontal durch eine Druckzone (3) hindurch verfäuft.

2004/062915 A1

WO 2004/062915 A1

Declarations under Rule 4.17

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI,

SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

of inventorship (Rule 4.17(iv)) for the following designation US

Published:

- With International Search Report.
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

Interplemental Application No PCT/DE 03/04258

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B41F5/24 B41F13/02

According to International Patent Classification (IFC) or to both national classification and IPC

B. FIELDS SEARCHED

Mininum documentation searched (classification system followed by classification symbols) IPC 7 B41F

Documentation searched other than minimum documentation to the extent that such documents are included. In the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

	ENTS CONSIDERED TO BE RELEVANT	
Category *	Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 188 003 A (KARL-HEINZ HONSEL) 23 September 1987 (1987-09-23)	1,3,5-8, 11-13,
Υ	the whole document	15,17 2,4,9, 10,14,16
X	NL 8 302 812 A (ANDERSON & VREELAND) 1 March 1985 (1985-03-01) the whole document	1-3,5,8, 13,15,17
γ	US 2 649 044 A (J. DUNGLER) 18 August 1953 (1953-08-18) column 3, line 16 -column 5, line 22; figures 1-4	2,4,9,10
	GB 1 057 456 A (COLODENSE) 1 February 1967 (1967-02-01) page 3, line 1 - line 52; figure 1	10

·	-/-			
X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.			
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority ctaim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document reterring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	 "T' later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the srt. "&" document member of the same patent family 			
Date of the actual completion of the international search	Date of mailing of the international search report			
17 May 2004	28/05/2004			
Name and meiting address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk	Authorized officer			
Tel (+31-70) 340-2040, Tx. 31 651 epo nl, Fac (+31-70) 540-5016	Loncke, J			

INTERNATIONAL SEARCH REPORT

Interpional Application No PCT/DE 03/04258

	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		03/04258		
Calegory *		Fieldwant to claim No.			
Υ	US 2002/1120FF A1 /M DAUM				
•	US 2002/113855 A1 (M. BAUM) 22 August 2002 (2002-08-22) figure 1		14		
r	US 2 142 148 A (THE PRINTCOTE) 3 January 1939 (1939-01-03) the whole document		16		
}	•				
'					
	•	•			
	•	•			
		•			
			•		
· 1	•	·	•		
		"			
			•		
		,	•		
ı		·			
	•	i			

INTERNATIONAL SEARCH REPORT

Information on patent family members

	Interional Application No		
		03/04258	
tent family ember(s)		Publication date	
3442732 A1		05-06-1986	

Patent document Publication Report Series				FC1/DE 03/04258		
	Publication date		Patent family member(s)		Publication date	
A	23-09-1987	DE	3442732	A1	05-06-1986	
A	01-03-1985	NONE				
A	18-08-1953	NONE				
. A	01-02-1967	DE	1286520	 3	. 09-01-1969	
A1	22-08-2002	WO	02066255 A	12	29-08-2002	
A	03-01-1939	NONE				
	A A A	A 23-09-1987 A 01-03-1985 A 18-08-1953 A 01-02-1967 A1 22-08-2002	A 23-09-1987 DE A 01-03-1985 NONE A 18-08-1953 NONE A 01-02-1967 DE A1 22-08-2002 WO	Publication date Patent family member(s) A 23-09-1987 DE 3442732 A 01-03-1985 NONE A 18-08-1953 NONE A 01-02-1967 DE 1286520 A1 22-08-2002 NO 02066255	Publication date Patent family member(s) A 23-09-1987 DE 3442732 A1 A 01-03-1985 NONE A 18-08-1953 NONE A 01-02-1967 DE 1286520 B A1 22-08-2002 WO 02066255 A2	